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4-23-97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of)
SCHADE et al.) Group Art Unit: 1505
)
Serial No. 08/325,219) Examiner: Cheng
)
Filed: October 21, 1994)
)

For: THE USE OF COPOLYMERS OF CARBOXYLIC ACIDS AND LONG-CHAIN COMPOUNDS WITH ISOLATED C-C MULTIPLE BONDS AS THICKENERS OR DISPERSANTS

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231, on:
March 31, 1997
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George F. Helfrich
Person Making Deposit
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March 31, 1997
Date of Signature

REPLY BRIEF

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

In accordance with 37 CFR 1.193(b), appellants submit herewith their reply brief, which is directed only to: (a) the correction of errors in appellants' brief on appeal, as pointed out by the examiner in the examiner's answer mailed on January 31, 1997; and (b) the new ground of rejection expressly stated by the examiner in the aforementioned examiner's answer.

ERRATA

As pointed out by the examiner in the examiner's answer, the summary of the invention in appellants' brief on appeal should be amended as follows:

(a) On page 2 of the brief on appeal, 7th line from the bottom of the page, "C_8-C_{30}-alkyl vinyl ethers" should be amended to read --C_{10}-C_{25}-alkyl vinyl ethers--.

(b) in the appendix on page 7 of the brief on appeal, delete all after "(1)" on lines 7-9, and replace it with the following: -- mono-to tetraunsaturated C_{14}-C_{24}-monocarboxylic acids as well as

their alkali metal and alkaline earth metal salts, C_1-C_4-alkyl esters, glycerol esters or polyglyceral esters,--.

NEW GROUND OF REJECTION

Claims 10-15 and 17 have been newly rejected under 35 USC 103(a) as obvious over George, European patent application EP 047,009. The examiner asserts that "George discloses a polymer of 70 to 93 weight percent of acrylic acid and 7 to 30 weight percent of an olefin with 6 to 18 carbon atoms." The examiner also asserts that "George teaches that these polymers have enhanced thickening properties, even in the presence of a salt," and that these polymers have applications in personal care products which include cosmetic or pharmaceutical compositions. Finally, the examiner contends that "Although each of these elements are not specifically matched, such is within the purview of the reference, and matching these disclosed elements has not been shown to lead to unexpected results and is therefore obvious."

ARGUMENT

As a whole, George is directed to "an interpolymer which has outstanding absorption and retention properties of water and ionic solutions such as urine or blood." Page 3, lines 2-5 of the George reference. "As water absorbent materials, these polymers find many uses in film, fiber, fabric, and similar forms. They are of particular utility in the disposable nonwoven industry where there is need for polymers which will absorb and retain water and ionic physiological fluids...Such applications require a polymer which must imbibe the liquid to be absorbed rapidly and be a polymer that will not dissolve. Further, the fluid must be immobilized or congealed in some way to be retained." Page 12, lines 6-19 of the George reference.

As is understood by those of skill in this art, the interpolymers of the George reference as a whole are important for

their enhanced hydrophilic properties. That is to say, these materials have an increased tendency to bind or absorb water or aqueous solutions, which binding or absorption results in swelling and the formation of gels.

On the other hand, the instantly claimed invention as a whole is directed to copolymers which serve as novel thickeners and dispersants for cosmetic and pharmaceutical applications, the hydrophobic qualities of these copolymers being of special significance. "The copolymers used according to the invention have a number of advantages. The chemical nature of the long-chain comonomers B means that the hydrophobic portions of the polymer cannot be removed by hydrolysis; the particular thickening and dispersing action is therefore retained even under strongly hydrolytic conditions." Instant specification, page 7, lines 18-23, emphasis supplied. As is understood by those of skill in this art, the copolymers of the presently claimed invention as a whole are important for their significant hydrophobic properties. That is to say, these materials are antagonistic to water and resist association with water. Moreover, the subject matter as a whole of the George reference and that of the instant invention as claimed differ in their focus: in George, demand absorbency is vital to success, whereas in the instant invention as claimed, viscosity is the significant characteristic. (Page 12, lines 19-34 of the George reference; Page 6, lines 12-30 of the instant application.)

Now applicants assert that the analysis for obviousness under 35 USC 103(a) requires that the inventive subject matter as a whole be compared with the prior art to determine if the differences therebetween would have been obvious to a person of ordinary skill in the art at the time the invention was made. Applicants further assert that the inventive subject matter as a whole includes not only the subject matter recited in the claim, but also those

properties and characteristics of such subject matter which are inherent therein and are disclosed in the specification. In re Antonie, 195 USPQ 6(CCPA 1997). Moreover, applicants point out that the subject matter as a whole embraces the structure recited, its properties, and the problem it solves. In re Wright, 6 USPQ 2d 1959 (Fed. Cir. 1988), overruled on other grounds in In re Dillon, 16 USPQ 2d 1897 (Fed. Cir. 1990, *in banc*).

Accordingly, applicants submit that the instant subject matter as a whole would not have been obvious to one of ordinary skill at the time the invention was made based on a knowledge of the George reference, when taken for what it as a whole reasonably teaches. Specifically, it would not have been obvious to modify George's hydrophilic, water absorbing material to produce a hydrophobic thickener as was being sought after by applicants.

There being no reason or incentive to modify the interpolymers of George as the examiner suggests, applicants submit that a *prima facie* case for obviousness has not been presented against instant claims 10-15 and 17. Applicants further submit that a *prima facie* case for obviousness has not been presented against claim 14 for the same reason. Applicants' position is based on the well-established principle that *prima facie* obviousness requires not only that evidence from the prior art as a whole would reasonably allow an examiner to reach a conclusion of obviousness, but also that the prior art as a whole compels such a conclusion. In re Spada, 15 USPQ 2d 1655 (Fed. Cir. 1990); In re Piasicki, 223 USPQ 785 (Fed. Cir. 1984). Clearly lacking here is the compelling of a conclusion of obviousness based on the George reference. There being no *prima facie* case for obviousness presented against the instant claims, it is not necessary for applicants to submit rebuttal evidence in the form of a showing.

CONCLUSION

Based on the above argument, applicants submit that the new ground of rejection which was presented in the examiner's answer should be withdrawn.

Respectfully submitted,

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